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Conservation Areas Network & Designated Conservation Lands on the Hearst Forest



Report prepared in conformance with the Forestry
Stewardship Council®, Canadian National Standard (2018)

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1. Purpose

This report was produced to explain the steps which Hearst Forest Management Inc. (HFMI) taken to satisfy the requirements of the Forest Stewardship Council® (FSC®) National Standard (2018), indicator 6.5. This indicator directs the certificate holder to identify and protect representative sample areas of all native ecosystems. Candidate DCLs were first chosen in 2012 based on the results of a gap analysis, which identified ecosystem types might be insufficiently protected within the ecoregion. Input received over the years from Indigenous communities was also considered when choosing areas to protect.

Proposed DCLs are permanently deferred from harvest, with the intent being to eventually obtain a more official “protected” status. The areas include rare native ecosystems, high caribou occupancy areas, and cultural/recreational values that are not already located in parks and conservation reserves. Areas planned as permanent deferrals for caribou (“X zones” in the Dynamic Caribou Habitat Schedule) in the current FMP are also considered DCLs.

DCLs are not protected from natural processes, other than fire, which is usually suppressed on the Hearst Forest. A major concern regarding the longevity of these areas, is that some shade-intolerant forest types (White birch, Jack pine, Poplar...) will not regenerate in the absence of disturbance. In these cases, “protection” (as it is currently understood) will eventually lead to succession to another forest type, as individual trees die.

Consultation with local Indigenous communities is ongoing with regards to candidate DCL areas. Some local First Nations have expressed concerns that the transition to a more official conservation status might result in the restrictions of their use of these areas. This is inconsistent with their world view and with their rights and must be addressed if the official designation of DCLs is to move forward in the spirit of Free, Prior and Informed Consent (FPIC).

2. Background

The Hearst Forest extends from the rolling terrain in ecodistrict 3E-2 (Hornepayne) northwards through ecodistrict 3E-1 (the Claybelt) to the approximate limit of merchantable timber stands at the edge of the James Bay Lowlands (ecodistricts 2E-2 and 2E-4).

The vast majority of ecodistricts 2E-2 and 2E-4 is beyond the Hearst Forest, where sparse timber is concentrated on river banks and where First Nations lead land use planning. Much of 2E-2 on the Hearst Forest is already in a provincial park. Gap analysis therefore focused on those ecodistricts 3E-1 and 3E-2 which make up the bulk of the Hearst Forest area.

2.1 Pre-existing Conservation Areas Network

There are three provincial parks (Fushimi, Nagagamisis, and Missinabai) and no federal parks within the boundaries of the Hearst Forest. All provincial parks and conservation areas were originally identified for

their recreational and ecological value. The provincial park boundaries also extend for a 200m width along both the Nagagamisis and the Missinabai rivers.

The Pichogen River Mixedwood Forest and Lac Ste Therese Ground Moraine Conservation Areas were identified as part of the Lands for Life/OLL initiative. They were identified as having unique landform-vegetation types during a gap analysis. Dubé Creek Conservation Area was delineated to protect a site with iceberg keel marks, because this is a unique landform feature. The boundaries of these conservation areas were designed to enclose all values being protected. Should operations occur in adjacent areas, they are protected by the same Area of Concern (AOC) prescription as a Provincial Park, according to table FMP-11 of the current Forest Management Plan.

Private land located within the bounds of the Hearst Forest is not considered in this analysis, with one exception. The Nature Conservancy of Canada (NCC) purchased the 7 private townships from Domtar in 2022. The NCC has publicly expressed that these areas (known as the Boreal Wildlands) will be held as the largest conservation project in Canada's history. All forested area within the Boreal Wildlands will be preserved. HFMI has partnered with the NCC in developing an initial management plan, which provided a roads and water crossings inventory and outlined restoration options for the Boreal Wildlands. Because the Boreal Wildlands meets the criteria of a "protected area" and the NCC has expressed their full support of being included as part of the conservation areas network on the Hearst Forest (see NCC commitment letter to HFMI in Appendix 9.1) it has been included as a *protected area* for gap analysis calculations.

Table 1. Summary of existing conservation areas network within the bounds of the Hearst Forest. Areas of each conservation reserve are broken down by Ecodistrict. The total percentage of forest area which each protected area accounts for is also shown, where "forest area" refers all Crown Land plus the area of the Boreal Wildlands.

Conservation Area	Disturbance History	Ecodistrict	Area (ha)	% of Total Forest Area
Nagagamisis Provincial Park	Never logged except for Frost rd. & areas near Hwy 11	2E-4 (Lower Kenogami River)	2,290	2.72
		2E-2 (Moose River)	662	
		3E-1 (Clay Belt)	2,769	
		3E-2 (Hornpayne)	31,609	
Missinaibi Provincial Park	Never logged north of Mattawishkwia River	2E-2 (Moose River)	2,563	0.84
		3E-1 (Clay Belt)	8,933	
Fushimi Lake Provincial Park	Mostly logged	3E-1 (Clay Belt)	5,293	0.39
Pichogen River Mixedwood Conservation Reserve	Never logged	3E-2 (Hornpayne)	2,958	0.22
Ste Therese Ground Moraine Conservation Area	All logged	3E-1 (Clay Belt)	150	0.01
Dube Creek Conservation Area	Never logged	3E-1 (Clay Belt)	1,133	0.08

Boreal Wildlands	Mostly logged by Domtar	3E-1 (Clay Belt)	52,005	6.76
		3E-2 (Hornpayne)	92,842	
Designated Conservation Lands (DCLs)	Varies between areas	All	38,367	2.72
Total			203,206	17.5

As shown in Table 1, about 17.5% of the total forest area is currently protected in the conservation areas network (including DCLs) on the Hearst Forest. Private land area other than the Boreal Wildlands was excluded from this calculation. This is in line with indicator 6.5.7 which states that at least 10% of the management unit must be set aside as conservation land. All points listed in this indicator were considered when identifying the conservation areas network.

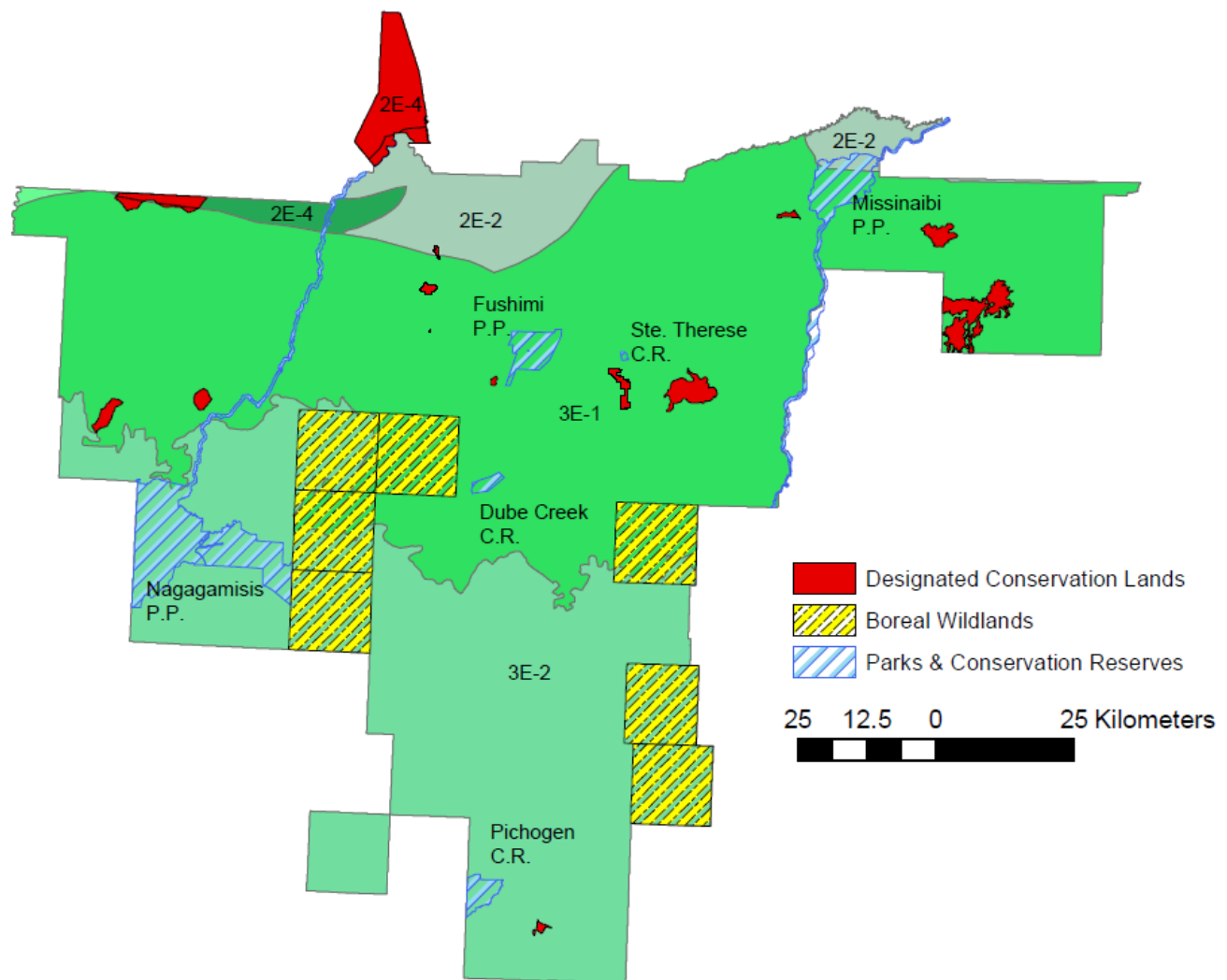


Figure 1. Map of the conservation areas network on the Hearst Forest with Conservation Reserves and Provincial Parks labeled. Ecodistricts are labeled and displayed in different shades of green.

2.2 Forest Management

The Hearst Forest unit is managed according to Ontario's regulations for Sustainable Forest Licence (SFL) holders on Crown Land. The Forest Management Planning (FMP) process ensures that standards are met both across the managed landscape and at the site scale. The lands proposed as DCL candidates for protection in this report are in addition to the much larger total forest area that is not part of the conservation areas network but will not be harvested. This includes mandatory reserves such as riparian buffers and residual patches as well as unmerchantable stands.

At the landscape-scale, MNR guides and policies ensure overall forest composition, structure and texture are within the bounds of expected natural variation. FMPs must maintain an amount of mature/old forest of each forest type which similar to that expected to be found on a more “natural” landscape. Within the zone managed for caribou, the FMP must also maintain a certain amount of old forest that is caribou habitat. On the Hearst Forest, there are currently 568,000 ha of mature/old forest, (56% of the total managed forest area). Over the next 100 years, the FMP projects that an average of 464,000 ha mature/old forest will be maintained. Some of this non-spatial mature/old area is deferred from harvest in large-scale caribou DCHS deferrals. Deferral locations can be adjusted in each new 10-yr FMP, as long as the forest within them meets certain criteria. The table below shows that 188,000 ha of forest that is currently mature will not be harvested for many decades to come. In all but 3E-2, the deferred stands mostly have never been harvested.

Table 2. Total area of the managed forest which will be deferred from harvest for at least 40 years as per the DCHS. Letters indicate which "blocks" areas form a part of - this determines in which 20-year period they will be harvested.

Ecodistrict	40 yrs - C	60yrs - D	80 yrs - E	Permanent - X
2E-2 (Moose River)	4,900			
2E-4 (Lower Kenogami)	6,100		7,200	1,600
3E-1 (Claybelt)	43,900	41,100	40,400	4,800
3E-2 (Hornepayne)	25,500	12,500		
Total	80,400	53,600	47,600	6,400

Areas which have been harvested in the past and have re-grown are often very similar ecologically to unharvested forest of the same age and type, depending on how and when they were harvested. The most important difference is accessibility to humans, which ranges from convenient to non-existent, especially due to the frequent use of low-impact winter roads for harvesting.

Regarding condition and ecological integrity, fire has been largely excluded from the Hearst Forest for decades. Due to climate and terrain, natural fire cycles are far longer on the Hearst Forest than in Northwestern Ontario. Fire suppression has been so effective that very little area burns. Prescribed burning, once common, has only occurred once since 1995.

The Crown land not in Parks and Conservations Reserves falls within IUCN (International Union for the Conservation of Nature) Category VI, *Protected Area with Sustainable Use of Natural Resources*:

"Category VI protected areas conserve ecosystems and habitats together with associated cultural values and traditional natural resource management systems. They are generally large, with most of the area in a natural condition, where a proportion is under sustainable natural resource management and where low-level non-industrial use of natural resources compatible with nature conservation is seen as one of the main aims of the area."

Some of these unharvestable areas may qualify as "Other effective area-based conservation measures" (OECM) by the IUCN.

3. Gap Analysis

Criteria 6.5.2 requires the forest manager to evaluate the sufficiency of the Conservation Areas Network as representative sample areas of native ecosystems. The degree to which the diversity of soils and vegetation on the land as a whole are protected was evaluated using the best available information. The following analysis identifies potential gaps in the completeness of the Conservation Areas Network in the Hearst Forest. Several approaches are used, so as to consider the problem from multiple angles while satisfying all requirements of the indicator 6.5.

The gap analysis was initially conducted in 2010 and updated in 2016 when Enhanced Forest Resource Inventory (eFRI) data became available. The eFRI is based on high-resolution, multispectral imagery from 2007. It was interpreted using stereo software and supported by over 2000 ground plots, resulting in a far more detailed inventory. The gap analysis was updated in 2023 to include the "Boreal Wildlands" after it was acquired by the NCC and declared a conservation area. DCL areas were first selected based on representation gaps identified during the 2010 gap analysis as well as input from local communities. Subsequent updates include DCL areas in the analysis, such that further gaps can be identified.

Candidate DCL areas underwent some revisions in 2024. The impact of these changes on ecosystem coverage by the conservation areas network was assessed for the just the Hearst Forest and judged to be minimal. In the coming year (2025), HFMI plans to finalize these DCL areas after first fulfilling all requirements to consult with CLFN and other Indigenous Communities. At this time, the entire gap analysis which evaluates the role of the Hearst conservation areas network across entire ecodistricts will be done. As such, the gap analyses presented below is slightly outdated (from 2023) and will be revised to reflect changes in the DCL areas in the coming year.

3.1 Ecosite

The 2016 eFRI data includes *ecosite* information for each polygon, which classifies land based on the 10 soil groups and 12 vegetation types. Ecosite has replaced *landform-vegetation (L/V) associations* which were used to classify polygons in the original 2010 gap analysis. It should be noted that soils can be difficult to interpret from imagery (whereas vegetation is directly visible) so the accuracy of soil classification is limited. Also note that ecosite does not provide information about stand age.

The MNR stipulates that within each Ecodistrict, at least 1% each ecosite or 50 ha should be preserved within the conservation areas network to ensure long-term biodiversity conservation. Ecosites that don't meet this minimum requirement are considered *representation gaps*. In order to assess the prevalence of each ecosite throughout the entire Ecodistrict, this part of the gap analysis had to be conducted using information from outside of the Hearst Forest Management Unit (into the Gordon Cosens and Abitibi Forests to the east of Hearst) because the Ecodistricts extend beyond our boundaries. This analysis was

conducted for the two Ecodistricts cover the vast majority of the Hearst Forest: 3E-1 (Table 3) and 3E-2 (Table 4). Ecosites with less than 50 ha in the study area were excluded from consideration (in grey in Tables 3 & 4). A simplified version of the results is included in the tables below. For more details contact HFMI.

Table 3. Results of Ecological Land Classification based gap analysis for the Ecodistrict 3E-1. All areas shown are the total for the entire ecodistrict, including parts of the Hearst, Gordon Cosens, and Abitibi Forest Management Units. The percentage of area in conservation lands for each ecosite was calculated and the objective of maintaining at least 1% or 50 within the conservation network was assessed (objective met = Yes or No).

Soil Type	Veg Type	Ecosite Code	Total Crown + Boreal Wildlands (ha)	Prov. Parks & Conservation Reserves (ha)	DCLs (ha)	Boreal Wildlands (ha)	All protected areas (ha)	% of total protected	1% or 50 ha protected
Key 2: Active 0.04%	n/a	B004	6.2	0	0	0	0	0	
	n/a	B005	281.86	47.77	5.51	0	53.28	18.9	Y
	n/a	B007	1179.59	7.27	4.12	0	11.39	0.97	Y
Key 3: Very Shallow 0.3%	shrub	B009	11.52	11.52	0	0	11.52	100	
	shrub	B010	5.64	2.74	0	0	2.74	48.6	
	PjSb	B011	35.33	0	0	0	0	0	
	Bf	B012	11359.87	333.27	1286.5	118.47	1738.24	15.3	Y
	PoBw	B013	12.29	0	0	0	0	0	
	Ce	B014	311.48	13.44	0	0	13.44	4.31	Y
	PoBw	B016	653.41	0	32.77	0	32.77	5.02	Y
	PjSb	B024	164.34	0	0	0	0	0	N
	PrPw	B026	75.18	0	0	0	0	0	N
	PrPw	B028	13.72	0	0	0	0	0	
Key 4: Dry Sandy 0.7%	shrub	B032	22.82	0	0	0	0	0	
	PrPw	B033	57.04	0	0	0	0	0	N
	SbPj	B034	16711.18	821.39	1256.22	476.03	2553.63	15.28	Y
	PjSb	B035	4553.66	154.86	415.91	181.27	752.04	16.52	Y
	Cw	B036	19.14	19.14	0	0	19.14	100	
	SbBf	B037	1851.63	98.81	216.29	265.96	581.06	31.38	Y
	Bf	B038	31.68	0	0	0	0	0	
	PoBw	B040	1614.21	104.02	239.31	78.85	422.18	26.15	Y
Key 5: Fresh Sandy	field	B044	75.45	0	0	0	0	0	N
	shrub	B046	30.44	0	0	0	0	0	
	shrub	B047	32.94	0	0	0	0	0	

OR Dry - Fresh Coarse Loamy 4.6%	PrPw	B048	143.5	105.11	0	0	105.11	73.25	Y
	SbPj	B049	49609.52	2622.73	5903.74	27.66	8554.13	17.24	Y
	PjSb	B050	51631.96	4789.25	3885.9	149.74	8824.89	17.09	Y
	Cw	B051	241.38	73.57	0	5.95	79.53	32.95	Y
	SbBf	B052	25940.44	2688.45	1681.32	599.85	4969.61	19.16	Y
	Bf	B053	169.07	0	29.4	0	29.4	17.39	Y
	PoBw	B055	40621.88	3001.38	886.53	1949.78	5837.68	14.37	Y
	Ash	B056	34.54	2.92	0	0	2.92	8.45	
	Oak	B057	64.44	64.44	0	0	64.44	100	Y
Key 6: Moist Sandy to Coarse Loamy 2.5%	field	B060	149.65	0	0	0	0	0	N
	shrub	B062	87.25	0	0	0	0	0	N
	shrub	B063	141.87	0.81	0	0	0.81	0.57	N
	PrPw	B064	63.73	6.58	0	0	6.58	10.33	Y
	PjSb	B065	62763.08	4134.42	4838.54	1025.97	9998.93	15.93	Y
	Cw	B066	954.86	137.22	23.14	117.33	277.69	29.08	Y
	SbBf	B067	13418.51	2316.65	527.19	369.9	3213.74	23.95	Y
	Bf	B068	296.96	103.47	0	19.9	123.37	41.54	Y
	PoBw	B070	15924.67	1458.64	320.12	1288.8	3067.56	19.26	Y
Key 7: Fresh Clayey 0.4%	SbPj	B082	2246.51	0	480.58	0	480.58	21.39	Y
	PjSb	B083	1905.71	12	158.09	0	170.1	8.93	Y
	Cw	B084	160.03	0	0	0	0	0	N
	SbBf	B085	5410.71	585.85	468.64	37.41	1091.9	20.18	Y
	Bf	B086	101.57	0	6.02	0	6.02	5.93	Y
	PoBw	B088	5437.26	284.54	345.48	32.54	662.57	12.19	Y
	Oak	B090	39.49	0	0	0	0	0	
Key 8: Fresh Silty to Fine Loamy 16.4%	field	B093	3227.52	0.04	5.17	0	5.22	0.16	N
	field	B094	12.35	0	0	0	0	0	
	shrub	B095	835.92	2.72	7.26	0	9.98	1.19	Y
	shrub	B096	1462.46	37.33	3.49	1.23	42.05	2.88	Y
	PrPw	B097	159.51	43.05	0	0	43.05	26.99	Y
	SbPj	B098	69019.19	615.1	5750.21	5.17	6370.48	9.23	Y

	PjSb	B099	173795.2	5307.47	10178.06	337.45	15822.98	9.1	Y
	Cw	B100	981.31	73.02	0	21.49	94.51	9.63	Y
	SbBf	B101	93305.99	5197.84	4663.55	614.93	10476.32	11.23	Y
	Bf	B102	1765.28	127.52	38.94	5.33	171.79	9.73	Y
	Pr mix	B103	19.63	0	0	0	0	0	
	PoBw	B104	258824.7	7666.25	10158.66	8285.49	26110.4	10.09	Y
	Ash	B105	49.6	9.7	0	0	9.7	19.56	Y
	Ash	B106	31.39	0	0	0	0	0	
	Maple	B108	31.63	0	0	0	0	0	
Key 9: Moist Silty to Fine Loamy 25.9%	field	B109	2384.24	0	7.48	0	7.48	0.31	N
	field	B110	1.92	0	0	0	0	0	
	shrub	B111	1087.27	0	14.38	0	14.38	1.32	Y
	shrub	B112	1023.78	11.91	2.57	0	14.49	1.41	Y
	Pw	B113	43.13	0	0	0	0	0	
	PjSb	B114	618368.4	13482.09	32419.55	5076.67	50978.3	8.24	Y
	Cw	B115	5529.85	545.65	173.53	445.97	1165.15	21.07	Y
	SbBf	B116	130608	6277.67	4057.4	2623.99	12959.07	9.92	Y
	Bf	B117	10037.35	383.27	248.71	66.99	698.98	6.96	Y
	Pw mix	B118	29.01	0	0	0	0	0	
	PoBw	B119	184507.1	5318.02	6641.12	5545.35	17504.49	9.49	Y
	Ash	B120	268.46	0	123.05	76.63	199.68	74.38	Y
	Maple	B124	2.81	0	0	0	0	0	
	Maple	B125	30.63	0	16.43	0	16.43	53.65	
Key 10: Hydric 49.1%	Treed Bog	B126	168755.8	9639.56	26027.23	214.75	35881.55	21.26	Y
	Org Poor Conif Swp	B127	260447.8	9114.37	20005.7	1239.83	30359.9	11.66	Y
	Min Poor Conif Swp	B222	1818.07	2.07	15.01	0	17.08	0.94	N
	Org Int Conif Swp	B128	910723.3	35019.89	60212.05	9712	104943.9	11.52	Y

	Min Int Conif Swp	B223	4590.97	22.65	32.37	0	55.01	1.2	Y
	Org Rich Conif Swp	B129	70450.77	1870.3	5678.94	2945.64	10494.88	14.9	Y
	Min Rich Conif Swp	B224	329.31	38.23	10.43	0	48.67	14.78	Y
	HW Swp	B130	5298.71	30.32	195.03	303.38	528.73	9.98	Y
	HW Swp	B133	964.42	3.77	124.84	0	128.61	13.33	Y
	Thicket	B134	1774.85	11.62	262.84	127.07	401.53	22.62	Y
	Thicket	B135	72324.49	2490.33	5710.94	379.33	8580.59	11.86	Y
	Treed Fen	B136	201283	13030.76	26321.15	1591.92	40943.82	20.34	Y
	Treed Bog	B137	27955.17	2128.68	5473.46	0	7602.14	27.19	Y
	Open Bog	B138	4159.79	613	1466.48	3.58	2083.06	50.08	Y
	Poor Fen	B139	16494.59	1238.15	1919.85	13.44	3171.43	19.23	Y
	Rich Fen	B140	10626.1	159.55	1472.02	15.27	1646.85	15.5	Y
	Rich Fen	B141	2045.25	92.22	710.69	0	802.9	39.26	Y
	M Marsh	B142	29321.85	766	1844.09	554.72	3164.81	10.79	Y
	M Marsh	B144	4074.35	202.6	230.09	21.6	454.29	11.15	Y
	Float Marsh	B145	4.54	0	1.89	0	1.89	41.54	
	Shore Fen	B146	16866.2	555.72	1174.82	182.83	1913.37	11.34	Y
	Shore Fen	B147	1449.72	74.35	188.8	28.35	291.5	20.11	Y
	Shallow Marsh	B148	12.89	0	0	0	0	0	
Key 11: 0.03% Rock	sparse veg	B161	27.17	0	0	0	0	0	
	sparse veg	B162	14.67	11.76	0	0	11.76	80.21	
	sparse veg	B163	8.02	0	0	0	0	0	
	sparse veg	B164	734.06	4.22	203.92	30.03	238.17	32.45	Y
	sparse veg	B165	118.18	0	7	0	7	5.92	Y
	sparse veg	B175	2.72	0	0	0	0	0	
	sparse veg	B177	4.54	0	0	0	0	0	

	sparse veg	B178	54.37	0	0	0	0	0	N
	sparse veg	B180	2.08	0	1.17	0	1.17	56.1	
	sparse veg	B181	3.59	0	3.59	0	3.59	100	

Table 4. Results of Ecological Land Classification based gap analysis for the Ecodistrict 3E-2. All areas shown are the total for the entire ecodistrict, including parts of the Hearst, Gordon Cosens, and Abitibi Forest Management Units. The percentage of area in conservation lands for each ecosite was calculated and the objective of maintaining at least 1% or 50 within the conservation network was assessed (objective met = Yes or No).

Soil Type	Veg Type	Ecosite Code	Total Crown + Boreal Wildlands	Prov. Parks & Conservation Reserves (ha)	DCLs (ha)	Boreal Wildlands (ha)	All protected areas (ha)	% of total protected	1% or 50 ha protected?
Key 2: Active 0.03%	n/a	B001	0	0	0	0	0	0	
	sparse veg	B003	4.81	0	0	2.84	2.84	59.07	
	sparse veg	B004	27.1	0	0	0	0	0	
	sparse veg	B005	5.49	0	0	0	0	0	
	sparse veg	B006	1.9	0	0	0	0	0	
	sparse veg	B007	447.71	1.4	0	14.7	16.1	3.6	Y
Key 3: Very Shallow 1.7%	shrub	B009	3.94	0	0	0	0	0	
	shrub	B011	12.48	0	0	0	0	0	
	PjSb	B012	26556.83	239.94	303.7	555.97	1099.61	4.14	Y
	Bf	B013	9.48	0	0	0	0	0	
	PoBw	B014	883.64	0	56.85	0	56.85	6.43	Y
	Cw	B016	1656.04	0	25.6	0	25.6	1.55	Y
	PoBw	B019	4.15	0	0	0	0	0	
	PjSb	B024	1573.91	0	14.71	491.42	506.13	32.16	Y
Key 4: Dry Sandy 1.8%	PrPw	B026	44.38	0	0	0	0	0	
	PrPw	B033	36.05	0	0	0	0	0	
	SbPj	B034	14689.22	475.93	26.01	156.57	658.51	4.48	Y
	PjSb	B035	7720.12	402.89	0	256.26	659.15	8.54	Y
	Cw	B036	30.69	0	0	0	0	0	

	SbBf	B037	2512.07	57.23	89.93	13.01	160.17	6.38	Y
	Bf	B038	141.81	0	0	0	0	0	N
	PoBw	B040	7146.82	148.26	33.21	144.52	325.99	4.56	Y
	HwOther	B043	118.93	0	0	0	0	0	N
Key 5: Fresh Sandy OR Dry - Fresh Coarse Loamy 37.1%	shrub	B046	9.45	0	0	0	0	0	
	shrub	B047	2.98	0	0	0	0	0	
	PrPw	B048	382.82	0	0	0	0	0	N
	SbPj	B049	141860.2	1223.49	204.78	952.39	2380.66	1.68	Y
	PjSb	B050	173702.2	1635.94	478.52	2489.94	4604.4	2.65	Y
	Cw	B051	1932.05	0	21.69	0	21.69	1.12	Y
	SbBf	B052	49823.23	791.84	55.49	255.33	1102.65	2.21	Y
	Bf	B053	982.78	27.61	0	0	27.61	2.81	Y
	PrPw	B054	214.31	0	0	0	0	0	N
	PoBw	B055	284183.7	3182.79	2365.01	5152.68	10700.48	3.77	Y
	Ash	B056	47.59	0	0	0	0	0	
	Oak	B057	31.54	0	0	0	0	0	
	Mixwd	B059	80.19	0	68.77	0	68.77	85.76	Y
Key 6: Moist Sandy to Coarse Loamy 10.0%	field	B060	6.06	0	0	0	0	0	
	shrub	B062	4.57	0	0	0	0	0	
	shrub	B063	149.02	0	0	0	0	0	N
	PrPw	B064	15.28	0	0	0	0	0	
	PjSb	B065	112165.4	1782	553.9	3494.33	5830.23	5.2	Y
	Cw	B066	4863.27	46.68	13.51	9.02	69.22	1.42	Y
	SbBf	B067	19298.05	679.49	188.39	650.31	1518.2	7.87	Y
	Bf	B068	1392.04	0	44.09	9.87	53.96	3.88	Y
	PoBw	B070	40120.28	1207.12	462.59	1824.74	3494.44	8.71	Y
	Ash	B071	64.9	0	0	0	0	0	N
	Maple	B075	5.46	0	0	0	0	0	
	Mxwd	B076	16.04	0	0	0	0	0	
Key 7: Fresh	SbPj	B082	175.78	17.14	0	0	17.14	9.75	Y
	PjSb	B083	214.58	5.81	0	0	5.81	2.71	Y

Clayey 0.1%	Cw	B084	13.88	0	0	0	0	0	
	SbBf	B085	272.94	0	0	1.36	1.36	0.5	N
	PoBw	B088	1033.86	0	0	353.75	353.75	34.22	Y
Key 8: Fresh Silty to Fine Loamy 8.7%	shrub	B096	15.11	0	0	0	0	0	
	PrPw	B097	127.69	0	0	0	0	0	N
	SbPj	B098	21312.46	87.53	7.96	635.93	731.42	3.43	Y
	PjSb	B099	41284.42	688.99	479.78	826.01	1994.77	4.83	Y
	Cw	B100	1071.34	12.84	0	12.78	25.62	2.39	Y
	SbBf	B101	17223.98	776.07	460.75	744.21	1981.03	11.5	Y
	Bf	B102	684.3	0	0	49.67	49.67	7.26	Y
	Pr mix	B103	11.77	0	0	0	0	0	
	PoBw	B104	77944.09	610	650.76	9137.65	10398.41	13.34	Y
	Ash	B105	8.4	0	0	0	0	0	
	Maple	B108	37.47	0	0	0	0	0	
	shrub	B111	5.81	0	0	0	0	0	
Key 9 Moist Silty to Fine Loamy 7.7%	shrub	B112	86.35	0	0	0	0	0	N
	Pw	B113	8.28	0	0	0	0	0	
	PjSb	B114	90183.01	1785.8	2605.1	8848.09	13238.99	14.68	Y
	Cw	B115	2870.39	41.52	121.5	95.03	258.05	8.99	Y
	SbBf	B116	19816.13	666.09	596.5	3475.39	4737.98	23.91	Y
	Bf	B117	3647.57	0	0	115.59	115.59	3.17	Y
	Pw	B118	15.53	0	0	15.53	15.53	100	Y
	Pw mix	B119	29660.6	120.52	536.86	5667.96	6325.35	21.33	Y
	PoBw	B120	55.16	0	0	14	14	25.38	Y
	Maple	B125	10.41	0	0	3	3	28.83	
Key 10: Hydric 32.9%	Treed Bog	B126	6872.87	500.62	38.46	832.51	1371.59	19.96	Y
	Org Poor Conif Swp	B127	41941.83	1405.84	990.01	3347.18	5743.03	13.69	Y
	Min Poor Conif Swp	B222	349.46	0	0	0	0	0	N

	Org Int Conif Swp	B128	372830.5	8230.89	9878.87	29721.29	47831.05	12.83	Y
	Min Int Conif Swp	B223	1515.82	0	0	0	0	0	N
	Org Rich Conif Swp	B129	71184.27	1437.95	1255.62	4636.92	7330.49	10.3	Y
	Min Rich Conif Swp	B224	438.5	0	0	0	0	0	N
	HW Swp	B130	1267.1	47.24	0	447.32	494.56	39.03	Y
	HW Swp	B133	169.44	0	0	0	0	0	N
	Thicket	B134	1192.76	1.39	36.84	130.86	169.09	14.18	Y
	Thicket	B135	16505.7	162.83	514.23	1064.31	1741.38	10.55	Y
	Treed Fen	B136	48413.24	1242.42	1658.73	3799.9	6701.05	13.84	Y
	Treed Bog	B137	891.23	30.63	3.44	70.56	104.63	11.74	Y
	Open Bog	B138	91.83	0	0	5	5	5.44	Y
	Poor Fen	B139	2735.66	35.47	25.3	159.1	219.86	8.04	Y
	Rich Fen	B140	1802.84	11.35	1.93	72.91	86.19	4.78	Y
	Rich Fen	B141	510.89	76.47	0	4.61	81.07	15.87	Y
	M Marsh	B142	17469	240.88	104.74	913.57	1259.18	7.21	Y
	M Marsh	B144	411.19	0	59.81	15.32	75.13	18.27	Y
	Float Marsh	B145	27.89	0	0	0	0	0	
	Shore Fen	B146	10534.26	276.3	79.41	389.94	745.64	7.08	Y
	Shore Fen	B147	670.82	30.54	12.53	114.71	157.77	23.52	Y
Key 11: Rock 0.05%	sparse veg	B158	4.54	0	0	0	0	0	
	sparse veg	B164	774.88	7.48	0	30.93	38.41	4.96	Y
	sparse veg	B165	62.58	6.67	0	22.6	29.28	46.78	Y
	sparse veg	B180	12.24	0	0	0	0	0	

The above gap analyses compare the conservation areas network (including DCLs) on all crown forest land (plus the Boreal Wildlands) across the ecodistricts 3E-1 (Claybelt) and 3E-2 (Hornepayne). It excludes ecosites classed as *anthropogenic* (permanently cleared for human use) and private land.

Because the analysis includes data from outside of the Hearst Forest, not all conservation gaps will be best addressed on the Hearst Forest. The analysis was meant to inform initial DCL selection, as well as all decisions related to the conservation areas network moving forwards.

The ecodistrict 3E-1 is dominated by the soil types *hydric* (49% of the ecodistrict) and *moist clays* (26%). These expanses of clay were not targeted by the initial establishment of the conservation areas network (during the 1999 Ontario Lands for Life/Living Legacy exercise) as the criteria favoured vegetative diversity and capturing rare site types. The extensive areas recently set aside as the Boreal Wildlands cover large expanses of these typical claybelt soils.

Overall, 12.2% of the entire ecodistrict 3E-1 and 8.2% of 3E-2 are protected. All other forests which form a part of the 3E-1 (Hearst, Gordon Cosens, Abitibi) are FSC® certified and required to maintain a minimum 10% of land within protected areas. In the 3E-2, only the Hearst, Kenogami, and Gordon Cosens forests are FSC® certified. It should be noted that, although protected areas appear sparse in the 3E-2, there is a significant amount of land under a different kind of land use restriction; restrictions on access and harvest to protect remote tourism, as laid out in MNRF's Crown Land Use Atlas. A disproportionately high percentage of the conservation areas network for 3E-2 is on the Hearst and Gordon Cosens Forest. As such, any changes on the Hearst Forest will take into account the representation of ecosites in this ecodistrict.

3.2 Forest Unit

Each polygon in the 2016 eFRI was also classified as one of 14 Forest Units (FU). FUs are the basis of wood supply and habitat modelling, and necessary for determining the Allowable Harvest Area. The percentage of each FU in the existing conservation areas network and in the DCL candidate areas was calculated to identify potential gaps in coverage. There is no set target for representation by Forest Unit therefore there was no need to conduct the analysis by Ecodistrict or to extend beyond the reaches of the Hearst Forest Management Unit. In the absence of an approved target, we might rely on the FSC®'s overall representation requirement of 10%. Note that FU does not account for age class or condition (i.e. post-fire, successional, or post-harvest).

Table 5. Gap analysis of Forest Units (FUs) found on the Hearst Forest. Ecodistricts were not considered in this exercise given the lack of defined threshold for sufficiency.

Forest Unit	Crown Total (ha)	Crown Total + NCC (ha)	Parks & CR (ha)	DCL (ha)	Boreal Wildlands	All protected areas (ha)	% in protected areas
BW1	7,151	8,779	694	174	1,628	2,497	35%
PO1	81,674	106,356	6,371	1,567	24,682	32,620	40%
LH1	10,918	13,662	1,128	607	2,743	4,478	41%
MW1	24,309	28,218	3,338	601	3,909	7,847	32%
MW2H	56,232	65,862	3,168	941	9,629	13,738	24%
MW2C	48,339	52,917	3,302	1,020	4,578	8,900	18%
PJ1	17,837	19,668	1,873	435	1,831	4,139	23%
PJ2	18,648	20,141	2,190	184	1,493	3,867	21%
SP1	192,266	200,748	10,273	5,478	8,483	24,234	13%
SF1	87,555	98,106	5,856	2,356	10,551	18,763	21%
LC1	136,477	162,754	4,125	9,404	26,277	39,806	29%
SB1	235,231	258,428	9,262	12,135	23,197	44,594	19%
SB3	116,509	125,511	8,737	7,490	9,002	25,229	22%
BOG	79,460	84,244	4,994	9,420	4,784	19,198	24%

There is no approved target for sufficiency by FU. Currently it would seem that a satisfactory portion of each FU is protected, although this will have to be monitored in the coming decades as many forest types will not regenerate to the same composition in the absence of disturbance.

3.3 Enduring Features

The *enduring feature* is a classification system developed by World Wildlife Fund which groups natural areas with similar origin and texture of surficial material and topography. Indicator 6.5.2 states that

enduring feature should be considered as part of the gap analysis process. Analysis should use inputs from the entire area of ecological influence (in the case of Ontario, refers to ecodistricts).

In October 2013, Ontario Nature provided HFMI with the enduring feature polygons, and calculated the amount of existing Parks/Conservation Reserves and HFMI candidate protected area (now DCLs) in each polygon. Ontario Nature highlighted 4 enduring features as lacking sufficient representation in protected areas within the network of protected areas in Ontario. Ontario Nature acknowledges that their inclusion of the 200,000 ha of private land into their calculation had an impact on the outcome.

The gap analysis for enduring features was conducted in a similar manner to the ecosite gap analysis. Areas and percentages are grouped by ecodistrict to ensure proper coverage of all ecosystems on the Hearst Forest.

For enduring features that are insignificant on the Hearst Forest (i.e. are mostly off the forest), there is no expectation of meeting representation targets. For this reason, any enduring feature for which less than 10% of the total area is found on Crown land on the Hearst Forest was excluded from consideration (in grey in the table below). These enduring features are better addressed on other forests. This threshold seems consistent with direction from WWF/Ontario Nature.

Table 6. Gap analysis for the based on the WWF's enduring features and subdivided by ecozones. Enduring features which are considered insignificant on the Hearst Forest (<10%) are shown and gray and not considered in the gap analysis results.

Ecodistrict	Enduring Feature (EF)	Entire EF (ha)	EF on the Hearst Forest (Crown + Boreal Wildlands)	% of EF on the Hearst Forest	EF in Provincial Parks and Conservation Reserves (ha)	EF in DCLs ha	EF in Boreal Wildlands(ha)	EF in all protected areas (ha)	% EF on Hearst Forest protected
2E-2	80436	139990	70807.6	50.58	14522.34	91.33	0	14613.67	20.64
	80456	426116	12119.6	2.84	665.33	0	0	665.33	5.49
	80510	674854	5023.98	0.74	0	0	0	0	0
	80512	1194560	11156.2	0.93	1910.79	0	0	1910.79	17.13
2E-4	80526	105121	3534.76	3.36	0	1570.75	0	1570.75	44.44
	80534	25529.8	17107.5	67.01	389.17	4804.22	0	5193.39	30.36
	80696	46186.6	1827.6	3.96	0	0	0	0	0
3E-1	80406	1368590	1867.85	0.14	73.43	0	0	73.43	3.93
	81248	27157.3	1014.47	3.74	0	0	0	0	0
	81254	265320	211609	79.76	14890.51	12554.81	0	27445.32	12.97
	81264	328588	223466.1	68.01	2145.71	4702.9	10693.02	17541.64	7.85
	81284	646869	187608.1	29	6650.46	9192.54	14599.57	30442.57	16.23
	81322	261955	100600.2	38.4	845.87	5799.49	12582.34	19227.7	19.11
	81360	31764	28650.31	90.2	0	0	12100.8	12100.8	42.24
	81378	31345.5	31139.5	99.34	675.31	9089.34	0	9764.65	31.36

	81380	6445.79	463.875	7.2	0	0	0	0	0
3E-2	81476	42879.8	11635.83	27.14	0	0	6700.47	6700.47	57.58
	81480	989333	41986.6	4.24	1512.66	0	5667.31	7179.97	17.1
	81488	30109.5	26359.39	87.55	0	0	18204.89	18204.89	69.06
	81494	136472	40315.4	29.54	16797.9	2517.21	0	19315.11	47.91
	81496	37996.9	37699.55	99.22	11409.4	0	285.15	11694.55	31.02
	81500	407607	211300.1	51.84	2016.76	7658.33	63351.66	73026.75	34.56
	81510	33392	23672.91	70.89	0	3325.96	0	3325.96	14.05
	81520	106154	67699.76	63.78	2968.27	2366.57	981.96	6316.79	9.33
	81538	177181	10152.3	5.73	0	0	0	0	0

[illegible]

There is no set target for sufficiency by enduring feature on Crown Land on the Hearst Forest alone; but given that FSC®'s overall representation requirement is 10%, and there are many Enduring Features, it is fair, and consistent with the Ontario Nature concerns, to aim for a minimum of 1/2 the overall target, i.e. 5%, per EF. With the Boreal Wildlands now being dedicated for conservation, this 5% target is met.

4. DCL Candidates

The selection of candidate DCLs was based on the results of the gap analysis as well as input from locals regarding site history, ecology and cultural value. Impact on wood supply also had to be accounted for.

When considering which under-represented sites might require additional protection, the ability of each forest type to persist under protection was considered. Certain shade-intolerant tree species will not exist in perpetuity and require disturbance by wildfire to regenerate naturally. This is a challenge which will have to be addressed in the coming decades if full coverage of all forest types is to be maintained. See section 5 for more details about the challenges related to protecting different species.

The direction to prioritize the protection of “intact” sites (i.e. those which have never been harvested) was not always possible to achieve for forests which do not often occur naturally (in the absence of fire suppression), such as White birch or Jack pine. While post-harvest regeneration can be designated as 'protected', it would be debatable what exactly it is being protected from given that the only major disturbance in the area is from forestry operations.

The 13 DCL candidates listed in Table 7 are currently permanently deferred from harvest on the Hearst Forest. In the coming years Hearst Forest aims to work towards obtaining official protected status for DCLs 1, 2, 3 and 4. Designation of the other DCLs as parks would conflict with the stated wishes of CLFN. They will be protected in a manner that is supported by the community.

Table 7. List of candidates for protection as Designated Conservation Lands on the Hearst Forest.

DCL Number	DCL Name	Area (ha)	Ecodistrict	Other Designation	Justification for protection
1	Burrel/ Rowlandson X Tract	3304	Clay Belt (3E-1) and Lower Kenogami River (2E-4)	DCHS X-tract (FMP)	- Fresh clay is a rare ecosite - Contributes to caribou habitat connectivity
2	Cross/ McCoig Nagagami Caribou X Tract	821	Clay Belt (3E-1)	DCHS X-tract (FMP)	- Classic caribou habitat and includes a calving area - Enables travel between the Nagagami caribou and the Far North - Traditional knowledge shared by CLFN elders acknowledges the importance of this area as caribou habitat - Provides significant representation of two very rare ecosites (B012 and B164) both of which tend to contain the terrestrial lichen which caribou eat.
3	Mercer Bog X Tract	1243	Clay Belt (3E-1)	DCHS X-tract (FMP)	- Largest "string bog" this far south - Integral to maintaining the Nagagami caribou population - Caribou use repeatedly for calving and summer habitat
4	Nagagami River Confluence	19310	Moose River (2E-2) and Kenogami River (2E-4)		- Important area for caribou activity - collared caribou have been recorded crossing this area
5	Recreational Trails	1017	Clay Belt (3E-1)	HCV 6.18 - Cultural Values	- Trails enjoyed by hundreds of community members for hiking, skiing and snowshoeing
6	Calypso Trail	137	Clay Belt (3E-1)	HCV 6.18 - Cultural Values	- Trail around Calypso Lake and associated with the youth summer camp "Camp source de vie"
7	Hillmer X Tract	6455	Clay Belt (3E-1)	DCHS X-tract (FMP)	- Caribou seen in area in the 1970s - Connects to a DCL in the neighbouring Gordon Cosens Forest - Hillmer Lake is managed as a remote tourism lake

8	McLeister Rock Jack Pine	1551	Clay Belt (3E-1)		- Excellent example of an uncommon ecosite (upland jack pine - rock terrain) - Jack pine has a greater chance of persisting on this site. On richer, deeper soils other vegetation encroaches and prevents seeding in. - McLeister Lake is a remote tourism lake
9	Renesig Creek Route	292	Clay Belt (3E-1)	HCV 6.18 - Cultural Values	- Encompasses 10 km winter route and 13 km summer route along Renesig Creek that partly follows the traditional trapline trail used by the Neegan family (a First Nations family who trapped in the area for generations) - This value received the greatest ever number of submission to a Hearst FMP - Harvest has been deferred indefinitely within 200m of the trail
10	Community Use Cedar Concentrations	534	Clay Belt (3E-1) and Moose River (2E-2)	HCV 6.18 - Cultural Values	- Cedar is very important to local Indigenous Peoples for spiritual, medicinal and practical uses (called "Ma-sa-kee-sic-mee-stik" meaning the tree of many uses) - According to Roger Wesley of CLFN, the protection of this area would represent a step in the right direction towards respecting Indigenous culture and reconciliation
11	Seven Sisters White Pine	6	Clay Belt (3E-1)	HCV 3.9 - Ecosystems in Decline Regionally	- Site contains the only 7 mature natural origin White pine on the Hearst Forest - The White pine has been somewhat successful at naturally regenerating in the area
12	Mattawishkwia Lakes Black ash - Wild rice Community	3412	Clay Belt (3E-1)	HCV 3.8 - Naturally Rare Ecosystems	- Black ash, White elm and Wild rice are all found in the area and considered rare on the Hearst and are all found in the area around the shallow Mattawishkwia and East Mattawishkwia lakes - Extensive wild rice area that is important

13	Minnipuka Lakes	285	Hornepayne (3E-2)		- Pure white birch stands of fire-origin (rare on the Hearst Forest) - Area last burned in 1923 and has not been harvested
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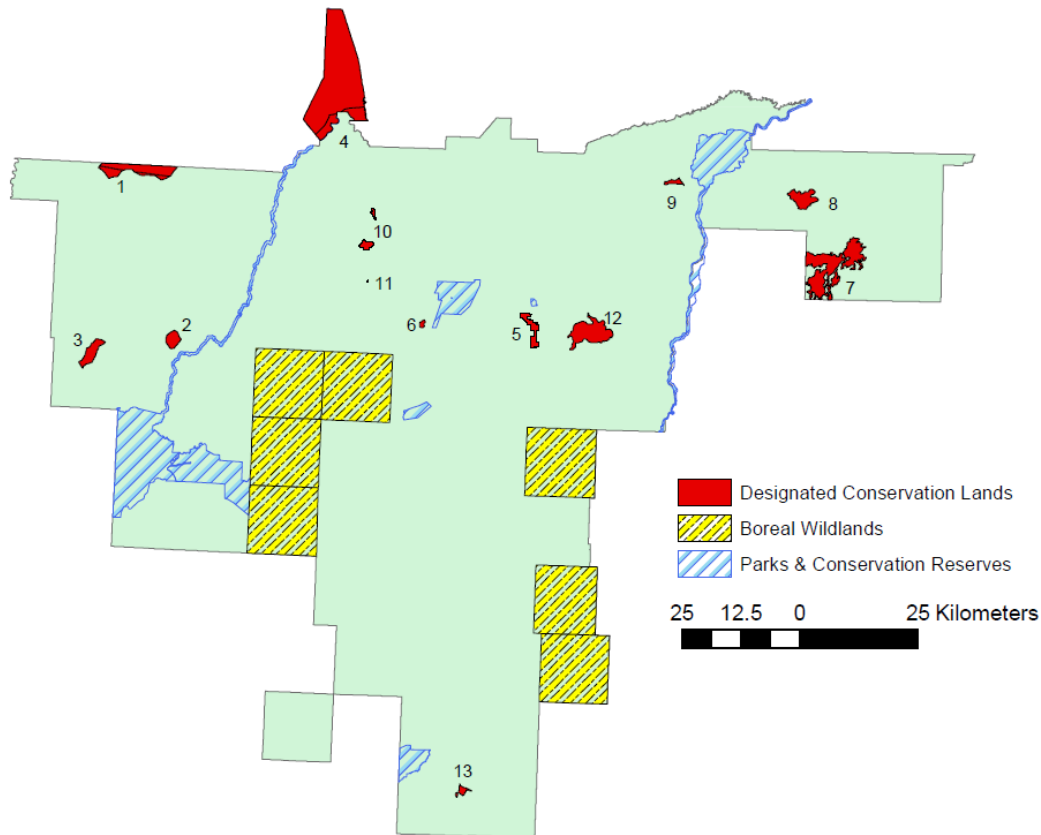


Figure 3. Map of all 13 DCL candidates labeled, and shown within the existing conservation areas network

5. Considerations for Protecting Species

The rareness and difficulty associated with protecting many of the following forest types can be attributed to the success of fire suppression in the area over the last century. It is well known that the boreal forest houses many ecosystems which evolved under frequent stand-replacing fires.

The exclusion of fire has resulted in certain species (Balsam fir and others) becoming more prevalent and many others struggling to regenerate. A former MNR Area biologist once declared that the rarest forest condition on the Hearst Forest is the recently burned type with pre-sapling and sapling regeneration.

4.1 Red and White pine

Red and White Pine is extremely rare on the Hearst Forest. Both species are protected on the and never harvested. Neither regenerate abundantly or well on the Hearst Forest (either artificially or naturally) so the conservation concern is that mature trees will have no replacements as they gradually die off. There are two plantations on the Forest near Calstock and HFMI has an objective to plant at least 10 ha of Pr/Pw by 2029.

Mature natural-origin red pine occurs as small patches or individuals in permanent riparian reserves in the coarse-soiled Arnott Moraine (on the shores of Red Pine Lake, Corine Lake, Big Skunk Lake, and Arnott Lake), generally on top of steep south-facing shorelines. There are also individuals on the south-facing shoreline of Widgeon Lake on the Rogers Road esker. Scattered individual red pines also are continually seeding into some adjacent areas and are now about 20 years old. It should be noted that in the eFRI, some stands are incorrectly listed as PrPw and do not actually contain these species. Most of the Red pine in the forest occurs in areas which are already riparian reserves and, in the past, these riparian reserves have been further extended to protect the species. A higher proportion of the species is thought to actually be protected than is represented in the gap analysis because it does not include riparian zones in the conservation areas network calculation.

There are 7 mature white pine super-canopy trees (The Seven Sisters) near the junction of the Calstock Bypass and Rogers Roads. The white pine has been successful at seeding in underneath the canopy and there is currently regenerating white pine in the area. As noted by reviewer Roger Wesley of CLFN,

"These 7-9 Eastern White Pine are naturally regenerating at this site which is something I believe needs further assessment. Assessing why and how they came to grow in this site so far north from their range is something I would consider an HCV that needs more detailed assessment, thus the fine filter approach suggestion....The 7-9 Eastern White Pine at this site are much older than the mentioned tree-planted pine found elsewhere on the forest, so assessing their origin is some-thing of importance. This site and species may want to be considered as a Biodiversity Reserve."

This stand with the most northerly natural mature white pine is DCL #11

4.2 Black Ash

In 2021, COSSARO assessed Black Ash as *endangered* based on future expected mortality in most of its range (not locally) from Emerald Ash Borer. As such, harvest of this species is prohibited. Black ash occurs almost exclusively along riparian areas, which are reserved from harvest. Black ash appears in the species composition information for the FRI. While black ash is not believed to be under threat on the Hearst Forest, a concentrated community is captured in DCL #12 (Mattawishkwia Lakes).

4.3 Jack Pine

Successful Jack pine regeneration is a challenge due to the impact of competing vegetation. The rich organic soil found throughout most of the Hearst Forest promotes the rapid growth of shrubs and hardwoods, which prevent jack pine seedlings from establishing in the absence of fire. It is typically only on bedrock or very dry sites that jack pine can regenerate naturally without fire. One candidate site with mature jack pine on bedrock (DCL #8) has been proposed for this reason. Although there are thousands of hectares of planted pine, young, fire-origin pine is rare. There is mature jack pine protected in Nagagamisis Prov. Park, but it is gradually dying out and being replaced by balsam fir. An extensive area of young planted jack pine in a harvested area was added to Nagagamisis Park in 1999, so it is protected from future harvest.

4.4 Poplar

Poplar is very common on the Hearst Forest, though far more in mixtures with conifer than in pure stands. Aspen poplar is partially merchantable. It regenerates well through root-suckers when stands are opened up to let light reach the forest floor. After harvesting, aspen-dominant stands usually regenerate well naturally. Without disturbance, (i.e. in a conservation reserve) aspen generally does not regenerate well. While there is much mature fire-origin poplar in Missinaibi, Nagagamisis and Pichogen Parks, there is not much young fire-origin poplar on undisturbed sites to replace the mature stands when they decay.

4.5 White Birch

White birch occurs in uplands like poplar but also as scattered small individuals in lowlands. Needing the right substrate to seed in, birch can arise post-fire or post-harvest. Individuals are short-lived and a protected stand may not persist very long. Extensive pure stands are rare on the

Forest, especially fire-origin never-harvested ones. A prime example has been captured in DCL#13.

4.6 Black Spruce

The ability of a black spruce stand to persist as black spruce over time depends on site class. Wet moss on lowlands is a good seedbed for spruce, but dry upland mineral soil, if not exposed will need to be tree planted. Black spruce in lowlands will persist over time ('store on the stump') better than most species and can provide valuable habitat for caribou. DCL candidates #1, 2 and 3, capture this condition well.

6. Community Input

FSC® requires that interested parties be involved in the Gap Analysis and selection of candidates, and HFMI practices a policy of community involvement and values the close relationship with those who live in and use the Forest. Representatives of CLFN and the town of Hearst are involved in the forest management planning process as directed by the MNR's Forest Management Planning Manual. Ongoing throughout the plan implementation process are local citizens comity meetings, quarterly meetings with CLFN, pre-harvest trapper meetings, nuisance beaver work, special sessions on topics such as caribou habitat, forest tenure and Far North planning. HFMI's 'open door' culture also encourages countless valuable interactions with community members. This DCL report and all prior versions have been made publicly available and input from community members is welcomed.

Past consultation regarding land use issues, particularly Lands for Life, have elicited low public support for more protected areas or parks. HFMI's selection process made use of existing deferrals in the Forest Management Plan (which had already been subject to extensive consultation) in order to fill representation gaps as efficiently as possible (in terms of impact to forest users). The selection of other candidates considered past input from trappers, tourism operators, and skiers.

In 2012, Gaetan Baillargeon (then-Native Liaison Officer for CLFN) reviewed the DCL selections and sought Chief and Council support as per CLFN's process. His August 2012 review supported HFMI's selections and stated:

"Having gone through the Gap Analysis document, I believe that a sufficient amount of forest has been identified. Do I think there could be more? If we decide to include more area to be protected, I think that these areas must also be managed in a manner that allows some forestry to take place so that we do not set ourselves up for big fires in the

long run of things. Having said that, however, I do believe that fire is a big part of our coniferous forest and we must start to include more prescribed burns so that we do not lose our forest to natural succession. We must not forget that pre-contact that First Nation people one time used fire for hunting and for harvesting different foods and medicine that need natural fires to become dominant."

Rick Allen is currently the Chief of CLFN. In 2013, as the CLFN Councillor who held the portfolio for Forestry and Lands issues, he reviewed and discussed the 2013 version with HFMI. He mostly approved of the candidates, except for one (formerly DCL #9) which overlaps the area of mining exploration which CLFN supports. For this reason, CLFN would not support the candidate (as currently delineated) eventually being granted official protected status. The area was removed from the DCL candidate list in 2024. He also said there was not general support for more land being turned into conventional MNR parks. According to Chief Allen, CLFN likes the idea of there being different allowable uses and different management in areas of special interest.

Bertha Sutherland, CLFN Land-Use Planning Coordinator, also reviewed the Gap Analysis and explained that CLFN's Land Use Planning process is focused on the Far North. Lauren Quist (then planning forester for HFMI) let Rick and Bertha know that HFMI (and the MNR) will consider more potential DCL areas if CLFN members want to put forward an area for special management - whatever that may look like. Bertha responded that during LUP discussions with members over land use designations in the Far North, she will let people know that designations are possible in the Hearst Forest as well, and that HFMI is open to discussions. Any future candidates are more likely to be proposed by CLFN than HFMI.

The original report was also reviewed by a number of people with forestry expertise who also knew the Hearst Forest and the local communities. Thoughtful reviews were provided by Marc Hebert, RPF, of College Boreal and Desneiges Larose, MScF, who was leading community involvement in forestry in Hearst. Peer Reviews of the 2013 version were also sought from people who specialize in conservation planning: Brent Tegler of North-South Environmental Inc, and Julee Boan of Ontario Nature.

More recently, HFMI tried to engage with CLFN on the issues of DCLs and HCVs, but forest management planning issues and Covid-19 have delayed meetings. To get some needed input, HFMI asked Roger Wesley of Constance Lake First Nation to review the 2019 version of the HCV report and provide ideas, and feedback. Roger talked with elders, and based on that and his extensive experience, provided the text referenced here as well as many other insights, suggestions and corrections, not only about the land, but also about the approach to such an exercise. Roger's comments have lead to some of the recent (2023-2024) revisions of the DCL network.

All reviewer comments and suggestions have improved this report and the Hearst Forest conservation areas network as a whole. They are available upon request.

7. Conclusion

The protection of DCL candidates, in combination with other elements of the conservation areas network represent an important step to conserving a range of ecosystem types on the Hearst Forest (as defined by the FSC® national standard, indicator 6.5). They have been selected to address insufficiencies identified during the gap analysis process and to protect areas of value to local communities.

This is intended to be a living document which will evolve to reflect changes in forest cover and community needs over time. Land use planning occurs in repeated cycles, while resource management and interactions with the public are constant. HFMI looks forward to continuing to connect with the people that live in and use the Hearst Forest in the coming years.

8. Record of Changes

This document has changed extensively since it was first produced. All recent, significant changes affecting the DCL candidates are listed below. Please note that current DCL numbering might not reflect past numbers.

- Addition of analysis by Enduring Features
- 2020: Addition of analysis of ELC Ecosites for the Forest as a whole
- 2021: Addition of analysis of ELC Ecosites by Ecodistrict
- 2018: Addition of DCL #12, Legge 1995 Burn, in response to Ontario Nature's analysis by Enduring Feature
- 2020: Change/expansion of DCL #3 & #9 to reflect the 2019 FMP DCHS
- 2020: Addition of DCL #13, Renesig Cr Route, in response to public use and support
- 2020: Addition of DCL #14, Cedar, and in response to recommendation by Roger Wesley of Constance Lake FN
- 2020: DCL #15, White Pine, due to being only natural stand on the Forest, and in response to recommendation by Roger Wesley of Constance Lake FN
- 2020: Addition of DCL #16, Mattawishkwia Lakes, due to being only elm and extensive wild rice on the Forest, and to improve representation
- 2022: Incorporation of Nature Conservation of Canada purchase of private townships
- 2024: Removal of candidate 9: mineral exploration conducted in the area with support of Constance Lake First Nation for a mine development. Conservation is inconsistent with the community's land use plans for this area.

- 2024: Addition of the Northern River confluence (DCL # 4) – replaces previous areas (Ebbs, Eureka and Legge Burns for Caribou habitat and a high value watershed ecosystem part of Achikami’s traditional territory.

9. Appendix

9.1 Boreal Wildlands Commitment Letter

From: [Kristyn Ferguson](#)
To: ["d.jarose@hearstforest.com"](mailto:d.jarose@hearstforest.com)
Cc: ["Lauren Quist"; Kaitlin Richardson](#)
Subject: Inclusion of Boreal Wildlands in Hearst Forest HCV network
Date: June-15-22 11:39:33

Hi Desneiges,

Thank you so much for the meeting last week. I'm really thrilled about the collaboration opportunities available to us and look forward to finding ways that we can work together in a good way on the land over the coming months, years and decades!

We discussed the potential inclusion of the Boreal Wildlands site in the Hearst Forest High Conservation Values network of lands and I wanted to reiterate that I fully support this idea.

NCC will be managing these tracts of land (totalling 358,000 acres, acquisition to be completed in August 2022) for conservation values for the long term, in line with our purpose and values to conserve nature, connect people to nature and work in collaboration with others to build a thriving world. Our Property Management Plan for this site will have a first draft completed this January and we expect it will highlight conservation actions including management of lands for wide-ranging mammals including caribou, ecological connectivity, restoration of degraded areas and road decommissioning, seeking opportunities to connect people to nature, limiting impacts to the land (e.g. development) and will not have a provision for commercial harvest in it. We may from time to time carry out forest management but it will be with conservation of the forest and reducing risks from fire, pests, etc. as a guiding principle. Our PMP is an adaptive document that will be updated every 5 years and we look forward to receiving input on it from HFMI and other partners as we work through it.

Thank you for sharing the HCV report – we are in the process of reviewing it and look forward to providing input into it. I like that, much like our PMP, it is a living document! We look forward to managing for good conservation values together with you across the landscape and I'm looking forward to our site visit in July.

Very best,
Kristyn



Kristyn Ferguson (she/her)

Program Director – Large Landscapes

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